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09/624,384	07/27/2000	Nobuaki Fukasawa	35.C14682	9569

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EXAMINER	
TRAN, PHILIP B	

ART UNIT	PAPER NUMBER
2155	6

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/624,384	Applicant(s) FUKASAWA ET AL.	
	Examiner Philip B Tran	Art Unit 2155	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *02 November 2002*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-42* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-42* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *27 July 2000* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

13)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

a) ☐ The translation of the foreign language provisional application has been received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5 .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Drawings

1. The drawings are objected to because of minor informalities :

a. In fig. 5, item 509, "**Updatable Deice** Address" should be changed to "Updateable Device Address".

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 4 and 22-23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claims are generally narrative and indefinite, failing to conform with current U.S. practice. They appear to be a literal translation into English from a foreign document and are replete with grammatical and idiomatic errors.

For example, in claim 4, lines 25-27, "a request transmitting step of transmitting a request to transmit said device information to said management server to another device" is unclear and indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim Rejections - 35 U.S.C. § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-3, 5, 7-9, 11, 15-17 and 19-21 are rejected under 35 U.S.C. § 102(e) as being anticipated by Hamner et al (Hereafter, Hamner), U.S. Pat. No. 6,076,106.

Regarding claim 1, Hamner teaches a processing method of device information in a network system in which a management server (= management server 12) for managing device information (= data) and various devices (= plurality of devices) are connected (i.e., managing a computer network including a plurality of devices wherein data is gathered about the configuration of the network including data about devices and the tasks performed upon each of the devices) [see Figs. 1 & 2A and Abstract and Col. 1, Lines 55-67 and Col. 3, Lines 31-47], comprising :

a transmitting step of transmitting a plurality of different types of device information to said management server at predetermined timings, respectively (i.e., periodically gathering data, with scheduling, at core services implemented within the management server 12 wherein this data includes the types of devices in the network, the quantity of each type of devices, their connectivity, and tasks performed upon each of the devices) [see Col. 3, Lines 31-56 and Col. 6, Lines 3-17].

Regarding claim 2, Hamner further teaches said plurality of different types of device information is static information (= types of devices), semi-static information (= displaying print jobs = layout), and dynamic information (= displaying nonfunctioning printers = device status), and in said transmitting step, said static information is transmitted in accordance with a power-on and said semi-static information and said dynamic information are transmitted in accordance with a change in status of the device (i.e., to gather and maintain data regarding types of devices in the network and tasks performed on each of devices on-line and off-line) [see Col. 3, Lines 47-63 and Col. 9, Lines 3-17].

Regarding claim 3, Hamner further teaches a setting step of setting said timing (= scheduling, periodic basis) [see Col. 3, Lines 47-51 and Col. 6, Lines 3-17].

Regarding claim 5, Hamner further teaches said device is a printer (= printer 207) [see Fig. 2A and Col. 4, Lines12-18].

Regarding claim 7, Hamner teaches a network device (= any device such as PCs, printers, etc.) connected through a network to a management server (= management server 12) for managing device information (= data) (i.e., managing a computer network including a plurality of devices wherein data is gathered about the configuration of the network including data about devices and the tasks performed upon

each of the devices) [see Figs. 1 & 2A and Abstract and Col. 1, Lines 55-67 and Col. 3, Lines 31-47], comprising :

transmitting means for transmitting a plurality of different types of device information to said management server at predetermined timings, respectively (i.e., periodically gathering data, with scheduling, at core services implemented within the management server 12 wherein this data includes the types of devices in the network, the quantity of each type of devices, their connectivity, and tasks performed upon each of the devices) [see Col. 3, Lines 31-56 and Col. 6, Lines 3-17].

Regarding claim 8, Hamner further teaches said plurality of different types of device information is static information (= types of devices), semi-static information (= displaying print jobs = layout), and dynamic information (= displaying nonfunctioning printers = device status), and said transmitting means transmits said static information is transmitted in accordance with a power-on and transmits said semi-static information and said dynamic information in accordance with a change in status of the device (i.e., to gather and maintain data regarding types of devices in the network and tasks performed on each of devices on-line and off-line) [see Col. 3, Lines 47-63 and Col. 9, Lines 3-17].

Regarding claim 9, Hamner further teaches a setting means for setting said timing (= scheduling, periodic basis) [see Col. 3, Lines 47-51 and Col. 6, Lines 3-17].

Regarding claim 11, Hamner further teaches said network device is a printer (= printer 207) [see Fig. 2A and Col. 4, Lines12-18].

Regarding claim 15, Hamner teaches a recording medium which stores a processing program of device information in a network system in which a management server (= management server 12) for managing device information (= data) and various devices (= plurality of devices) are connected (i.e., managing a computer network including a plurality of devices wherein data is gathered about the configuration of the network including data about devices and the tasks performed upon each of the devices) [see Figs. 1 & 2A and Abstract and Col. 1, Lines 55-67 and Col. 3, Lines 31-47], wherein said processing program comprises a transmitting step of transmitting a plurality of different types of device information to said management server at predetermined timings, respectively (i.e., periodically gathering data, with scheduling, at core services implemented within the management server 12 wherein this data includes the types of devices in the network, the quantity of each type of devices, their connectivity, and tasks performed upon each of the devices) [see Col. 3, Lines 31-56 and Col. 6, Lines 3-17].

Regarding claim 16, Hamner further teaches said plurality of different types of device information is static information (= types of devices), semi-static information (= displaying print jobs = layout), and dynamic information (= displaying nonfunctioning printers = device status), and in said transmitting step, said static information is

transmitted in accordance with a power-on and said semi-static information and said dynamic information are transmitted in accordance with a change in status of the device (i.e., to gather and maintain data regarding types of devices in the network and tasks performed on each of devices on-line and off-line) [see Col. 3, Lines 47-63 and Col. 9, Lines 3-17].

Regarding claim 17, Hamner further teaches said processing program comprises a setting step of setting said timing (= scheduling, periodic basis) [see Col. 3, Lines 47-51 and Col. 6, Lines 3-17].

Regarding claim 19, Hamner teaches a processing program of device information in a network system in which a management server (= management server 12) for managing device information (= data) and various devices (= plurality of devices) are connected (i.e., managing a computer network including a plurality of devices wherein data is gathered about the configuration of the network including data about devices and the tasks performed upon each of the devices) [see Figs. 1 & 2A and Abstract and Col. 1, Lines 55-67 and Col. 3, Lines 31-47], comprising a transmitting step of transmitting a plurality of different types of device information to said management server at predetermined timings, respectively (i.e., periodically gathering data, with scheduling, at core services implemented within the management server 12 wherein this data includes the types of devices in the network, the quantity of each type of

devices, their connectivity, and tasks performed upon each of the devices) [see Col. 3, Lines 31-56 and Col. 6, Lines 3-17].

Regarding claim 20, Hamner further teaches said plurality of different types of device information is static information (= types of devices), semi-static information (= displaying print jobs = layout), and dynamic information (= displaying nonfunctioning printers = device status), and in said transmitting step, said static information is transmitted in accordance with a power-on and said semi-static information and said dynamic information are transmitted in accordance with a change in status of the device (i.e., to gather and maintain data regarding types of devices in the network and tasks performed on each of devices on-line and off-line) [see Col. 3, Lines 47-63 and Col. 9, Lines 3-17].

Regarding claim 21, Hamner further teaches said program comprising a setting step of setting said timing (= scheduling, periodic basis) [see Col. 3, Lines 47-51 and Col. 6, Lines 3-17].

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 4, 6, 10, 12-14, 18 and 22-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hamner et al (Hereafter, Hamner), U.S. Pat. No. 6,076,106 in view of Onaga, U.S. Pat. No. 6,266,693.

Regarding claim 4, Hamner does not explicitly teach a request transmitting step of transmitting a request to transmit said device information to said management server to another device, and an obtaining step of obtaining the device information of the requesting device in accordance with said request. However, Hamner does suggest managing a computer network including a plurality of devices wherein data is gathered about the configuration of the network including data about devices and the tasks performed upon each of the devices [see Hamner, Figs. 1 & 2A and Abstract and Col. 1, Lines 55-67 and Col. 3, Lines 31-47] and data are periodically gathered at core services implemented within the management server 12 wherein this data includes the types of devices in the network, the quantity of each type of device, their connectivity, and tasks performed upon each of the devices [see Hamner, Col. 3, Lines 31-56 and Col. 6, Lines

3-17]. Thus, this discloses that obtained device information is transmitted to the management server.

Onaga, in the same field of managing status and communication of devices in the network endeavor, discloses the request for status information and the flow of status information of network device (= Multifunction Peripheral (MFP) 110a) in communication with the Host 110b, the file server 120 (= management server) and the workstation 150 (= another device) [see Onaga, Figs. 4-8 and Col. 9, Line 44 to Col. 10, Line 15 and Col. 11, Line 11 to Col. 12, Line 50]. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to incorporate the use of the request for status information and the flow of status information among devices in the network, disclosed by Onaga, into managing different types of devices in the network disclosed by Hamner, in order to keep the status information refreshed for improving performance of the devices [see Onaga, Col. 12, Lines 34-50] and thus enhance the performance of the network.

Regarding claim 6, Hamner does not explicitly teach said device is a copying apparatus. However, Hamner does suggest various devices connected in the network, either physical device or logical device, including PCs, printers, NICs, etc [see Hamner, Figs. 2A-2B and Col. 3, Lines 13-16 and Col. 4, Lines 15-24]. This implies that various devices connected in the network are not fixed but flexible in term of different types and thus a copying apparatus should not be excluded.

Onaga, in the same field of managing status and communication of devices in the network endeavor, discloses Multifunction Peripheral (MFP) Interface standard that defines a network device like a computer equipment is used to perform multiple functions such as scan, print, facsimile transmit, and/or copy documents [see Onaga, Col. 2, Line 21 to Col. 3, Line 7 and Col. 5, Line 24 to Col. 6, Line 24]. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to incorporate the use of a Multifunction Peripheral (MFP) as a copying apparatus in the network, disclosed by Onaga, into managing different types of devices in the network disclosed by Hamner, in order to enhance productivity capabilities and cost savings [see Onaga, Col. 3, Lines 6-7] by using one device to handle multiple functions without implementation of a plurality of devices and thus versatility is improved.

Regarding claim 10, Hamner does not explicitly teach request transmitting means for transmitting a request to transmit said device information to said management server to another device. However, Hamner does suggest managing a computer network including a plurality of devices wherein data is gathered about the configuration of the network including data about devices and the tasks performed upon each of the devices [see Hamner, Figs. 1 & 2A and Abstract and Col. 1, Lines 55-67 and Col. 3, Lines 31-47] and data are periodically gathered at core services implemented within the management server 12 wherein this data includes the types of devices in the network, the quantity of each type of device, their connectivity, and tasks performed upon each of

the devices [see Hamner, Col. 3, Lines 31-56 and Col. 6, Lines 3-17]. Thus, this discloses that device information is transmitted to the management server.

Onaga, in the same field of managing status and communication of devices in the network endeavor, discloses the request for status information and the flow of status information of network device (= Multifunction Peripheral (MFP) 110a) in communication with the Host 110b, the file server 120 (= management server) and the workstation 150 (= another device) [see Onaga, Figs. 4-8 and Col. 9, Line 44 to Col. 10, Line 15 and Col. 11, Line 11 to Col. 12, Line 50]. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to incorporate the use of the request for status information and the flow of status information among devices in the network, disclosed by Onaga, into managing different types of devices in the network disclosed by Hamner, in order to keep the status information refreshed for improving performance of the devices [see Onaga, Col. 12, Lines 34-50] and thus enhance the performance of the network.

Regarding claim 12, Hamner does not explicitly teach said network device is a copying apparatus. However, Hamner does suggest various devices connected in the network, either physical device or logical device, including PCs, printers, NICs, etc [see Hamner, Figs. 2A-2B and Col. 3, Lines 13-16 and Col. 4, Lines 15-24]. This implies that various devices connected in the network are not fixed but flexible in term of different types and thus a copying apparatus should not be excluded.

Onaga, in the same field of managing status and communication of devices in the network endeavor, discloses Multifunction Peripheral (MFP) Interface standard that defines a network device like a computer equipment is used to perform multiple functions such as scan, print, facsimile transmit, and/or copy documents [see Onaga, Col. 2, Line 21 to Col. 3, Line 7 and Col. 5, Line 24 to Col. 6, Line 24]. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to incorporate the use of a Multifunction Peripheral (MFP) as a copying apparatus in the network, disclosed by Onaga, into managing different types of devices in the network disclosed by Hamner, in order to enhance productivity capabilities and cost savings [see Onaga, Col. 3, Lines 6-7] by using one device to handle multiple functions without implementation of a plurality of devices and thus versatility is improved.

Regarding claim 13, Hamner does not explicitly teach request receiving means for receiving a request to transmit said device information to said management server, and obtaining means for obtaining the device information of the requesting network device in accordance with said received request. However, Hamner does suggest managing a computer network including a plurality of devices wherein data is gathered about the configuration of the network including data about devices and the tasks performed upon each of the devices [see Hamner, Figs. 1 & 2A and Abstract and Col. 1, Lines 55-67 and Col. 3, Lines 31-47] and data are periodically gathered at core services implemented within the management server 12 wherein this data includes the types of devices in the network, the quantity of each type of device, their connectivity, and tasks

performed upon each of the devices [see Hamner, Col. 3, Lines 31-56 and Col. 6, Lines 3-17]. Thus, this discloses that device information is transmitted to the management server.

Onaga, in the same field of managing status and communication of devices in the network endeavor, discloses the request for status information and the flow of status information of network device (= Multifunction Peripheral (MFP) 110a) in communication with the Host 110b, the file server 120 (= management server) and the workstation 150 (= another device) [see Onaga, Figs. 4-8 and Col. 9, Line 44 to Col. 10, Line 15 and Col. 11, Line 11 to Col. 12, Line 50]. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to incorporate the use of the request for status information and the flow of status information among devices in the network, disclosed by Onaga, into managing different types of devices in the network disclosed by Hamner, in order to keep the status information refreshed for improving performance of the devices [see Onaga, Col. 12, Lines 34-50] and thus enhance the performance of the network.

Regarding claim 14, Hamner does not explicitly teach said network device is a host computer. However, Hamner does suggest various devices connected in the network, either physical device or logical device, including PCs, printers, NICs, etc [see Hamner, Figs. 2A-2B and Col. 3, Lines 13-16 and Col. 4, Lines 15-24]. This implies that various devices connected in the network are not fixed but flexible in term of different types and thus a host computer should not be excluded.

Onaga, in the same field of managing status and communication of devices in the network endeavor, discloses a host as a computer device capable of providing commands and data to operate a peripheral like a Multifunction Peripheral (MFP) for MFP performing multiple functions such as scan, print, facsimile transmit, and/or copy documents [see Onaga, Col. 2, Line 21 to Col. 3, Line 7 and Col. 5, Line 24 to Col. 6, Line 24]. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to incorporate the use of a network device as a host in the network, disclosed by Onaga, into managing different types of devices in the network disclosed by Hamner, in order to establish a communication path with Multifunction Peripheral (MFP) and manage multiple functions such as print jobs, fax jobs and scan jobs [see Onaga, Col. 2, Lines 21-45 and Col. 6, Lines 16-24]. This combination of host and MFP enhances productivity capabilities and cost savings [see Onaga, Col. 3, Lines 6-7] by using one device to handle multiple functions without implementation of a plurality of devices and thus versatility is improved.

Regarding claim 18, Hamner does not explicitly teach a request transmitting step of transmitting a request to transmit said device information to said management server to another device, and an obtaining step of obtaining the device information of the requesting device in accordance with said request. However, Hamner does suggest managing a computer network including a plurality of devices wherein data is gathered about the configuration of the network including data about devices and the tasks performed upon each of the devices [see Hamner, Figs. 1 & 2A and Abstract and Col. 1,

Lines 55-67 and Col. 3, Lines 31-47] and data are periodically gathered at core services implemented within the management server 12 wherein this data includes the types of devices in the network, the quantity of each type of device, their connectivity, and tasks performed upon each of the devices [see Hamner, Col. 3, Lines 31-56 and Col. 6, Lines 3-17]. Thus, this discloses that device information is transmitted to the management server.

Onaga, in the same field of managing status and communication of devices in the network endeavor, discloses the request for status information and the flow of status information of network device (= Multifunction Peripheral (MFP) 110a) in communication with the Host 110b, the file server 120 (= management server) and the workstation 150 (= another device) [see Onaga, Figs. 4-8 and Col. 9, Line 44 to Col. 10, Line 15 and Col. 11, Line 11 to Col. 12, Line 50]. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to incorporate the use of the request for status information and the flow of status information among devices in the network, disclosed by Onaga, into managing different types of devices in the network disclosed by Hamner, in order to keep the status information refreshed for improving performance of the devices [see Onaga, Col. 12, Lines 34-50] and thus enhance the performance of the network.

Regarding claim 22, Hamner does not explicitly teach a request transmitting step of transmitting a request to transmit said device information to said management server to another device, and an obtaining step of obtaining the device information of the

requesting device in accordance with said request. However, Hamner does suggest managing a computer network including a plurality of devices wherein data is gathered about the configuration of the network including data about devices and the tasks performed upon each of the devices [see Hamner, Figs. 1 & 2A and Abstract and Col. 1, Lines 55-67 and Col. 3, Lines 31-47] and data are periodically gathered at core services implemented within the management server 12 wherein this data includes the types of devices in the network, the quantity of each type of device, their connectivity, and tasks performed upon each of the devices [see Hamner, Col. 3, Lines 31-56 and Col. 6, Lines 3-17]. Thus, this discloses that device information is transmitted to the management server.

Onaga, in the same field of managing status and communication of devices in the network endeavor, discloses the request for status information and the flow of status information of network device (= Multifunction Peripheral (MFP) 110a) in communication with the Host 110b, the file server 120 (= management server) and the workstation 150 (= another device) [see Onaga, Figs. 4-8 and Col. 9, Line 44 to Col. 10, Line 15 and Col. 11, Line 11 to Col. 12, Line 50]. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to incorporate the use of the request for status information and the flow of status information among devices in the network, disclosed by Onaga, into managing different types of devices in the network disclosed by Hamner, in order to keep the status information refreshed for improving performance of the devices [see Onaga, Col. 12, Lines 34-50] and thus enhance the performance of the network.

Regarding claim 23, Hamner teaches a processing method of device information in a network system in which a management server (= management server 12) for managing device information (= data) and various devices (= plurality of devices) are connected (i.e., managing a computer network including a plurality of devices wherein data is gathered about the configuration of the network including data about devices and the tasks performed upon each of the devices) [see Figs. 1 & 2A and Abstract and Col. 1, Lines 55-67 and Col. 3, Lines 31-47], comprising of transmitting the device information of the requesting device to said management server (i.e., periodically gathering data at core services implemented within the management server 12 wherein this data includes the types of devices in the network, the quantity of each type of devices, their connectivity, and tasks performed upon each of the devices) [see Col. 3, Lines 31-56].

Hamner does not explicitly teach a request transmitting step of transmitting a request to transmit said device information to said management server to another device and a step of receiving said request. However, Hamner does suggest data are periodically gathered at core services implemented within the management server 12 wherein this data includes the types of devices in the network, the quantity of each type of device, their connectivity, and tasks performed upon each of the devices [see Hamner, Col. 3, Lines 31-56 and Col. 6, Lines 3-17]. Thus, this discloses that device information is transmitted to the management server.

Onaga, in the same field of managing status and communication of devices in the network endeavor, discloses the request for status information and the flow of status

information of network device (= Multifunction Peripheral (MFP) 110a) in communication with the Host 110b, the file server 120 (= management server) and the workstation 150 (= another device) [see Onaga, Figs. 4-8 and Col. 9, Line 44 to Col. 10, Line 15 and Col. 11, Line 11 to Col. 12, Line 50]. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to incorporate the use of the request for status information and the flow of status information among devices in the network, disclosed by Onaga, into managing different types of devices in the network disclosed by Hamner, in order to keep the status information refreshed for improving performance of the devices [see Onaga, Col. 12, Lines 34-50] and thus enhance the performance of the network.

Regarding claim 24, Hamner does not explicitly teach an obtaining step of obtaining the device information of said device from the requesting device in accordance with said received request. However, Hamner does suggest managing a computer network including a plurality of devices wherein data is gathered about the configuration of the network including data about devices and the tasks performed upon each of the devices [see Hamner, Figs. 1 & 2A and Abstract and Col. 1, Lines 55-67 and Col. 3, Lines 31-47] and data are periodically gathered at core services implemented within the management server 12 wherein this data includes the types of devices in the network, the quantity of each type of device, their connectivity, and tasks performed upon each of the devices [see Hamner, Col. 3, Lines 31-56 and Col. 6, Lines

3-17]. Thus, this discloses that device information is transmitted to the management server.

Onaga, in the same field of managing status and communication of devices in the network endeavor, discloses the request for status information and the flow of status information of network device (= Multifunction Peripheral (MFP) 110a) in communication with the Host 110b, the file server 120 (= management server) and the workstation 150 (= another device) [see Onaga, Figs. 4-8 and Col. 9, Line 44 to Col. 10, Line 15 and Col. 11, Line 11 to Col. 12, Line 50]. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to incorporate the use of the request for status information and the flow of status information among devices in the network, disclosed by Onaga, into managing different types of devices in the network disclosed by Hamner, in order to keep the status information refreshed for improving performance of the devices [see Onaga, Col. 12, Lines 34-50] and thus enhance the performance of the network.

Regarding claim 25, Hamner further teaches in said device information transmitting step, a plurality of different types of device information is transmitted to said management server at predetermined timings, respectively (i.e., periodically gathering data, with scheduling, at core services implemented within the management server 12 wherein this data includes the types of devices in the network, the quantity of each type of devices, their connectivity, and tasks performed upon each of the devices) [see Col. 3, Lines 31-56 and Col. 6, Lines 3-17].

Regarding claim 26, Hamner further teaches said plurality of different types of device information is static information (= types of devices), semi-static information (= displaying print jobs = layout), and dynamic information (= displaying nonfunctioning printers = device status), and in said device information transmitting step, said static information is transmitted in accordance with a power-on and said semi-static information and said dynamic information are transmitted in accordance with a change in status of the device (i.e., to gather and maintain data regarding types of devices in the network and tasks performed on each of devices on-line and off-line) [see Col. 3, Lines 47-63 and Col. 9, Lines 3-17].

Regarding claim 27, Hamner further teaches a setting step of setting said timing (= scheduling, periodic basis) [see Col. 3, Lines 47-51 and Col. 6, Lines 3-17].

Regarding claim 28, Hamner teaches a network device connected via a network to a management server (= management server 12) for managing device information (= data) (i.e., managing a computer network including a plurality of devices wherein data is gathered about the configuration of the network including data about devices and the tasks performed upon each of the devices) [see Figs. 1 & 2A and Abstract and Col. 1, Lines 55-67 and Col. 3, Lines 31-47], comprising of transmitting the device information of the requesting device to said management server (i.e., periodically gathering data at core services implemented within the management server 12 wherein this data includes

the types of devices in the network, the quantity of each type of devices, their connectivity, and tasks performed upon each of the devices) [see Col. 3, Lines 31-56].

Hamner does not explicitly teach receiving means for receiving a request to transmit the device information to said management server from another network device. However, Hamner does suggest data are periodically gathered at core services implemented within the management server 12 wherein this data includes the types of devices in the network, the quantity of each type of device, their connectivity, and tasks performed upon each of the devices [see Hamner, Col. 3, Lines 31-56 and Col. 6, Lines 3-17]. Thus, this discloses that device information is transmitted to the management server.

Onaga, in the same field of managing status and communication of devices in the network endeavor, discloses the request for status information and the flow of status information of network device (= Multifunction Peripheral (MFP) 110a) in communication with the Host 110b, the file server 120 (= management server) and the workstation 150 (= another device) [see Onaga, Figs. 4-8 and Col. 9, Line 44 to Col. 10, Line 15 and Col. 11, Line 11 to Col. 12, Line 50]. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to incorporate the use of the request for status information and the flow of status information among devices in the network, disclosed by Onaga, into managing different types of devices in the network disclosed by Hamner, in order to keep the status information refreshed for improving performance of the devices [see Onaga, Col. 12, Lines 34-50] and thus enhance the performance of the network.

Regarding claim 29, Hamner does not explicitly teach obtaining means for obtaining the device information of said device from the requesting network device in accordance with said received request. However, Hamner does suggest managing a computer network including a plurality of devices wherein data is gathered about the configuration of the network including data about devices and the tasks performed upon each of the devices [see Hamner, Figs. 1 & 2A and Abstract and Col. 1, Lines 55-67 and Col. 3, Lines 31-47] and data are periodically gathered at core services implemented within the management server 12 wherein this data includes the types of devices in the network, the quantity of each type of device, their connectivity, and tasks performed upon each of the devices [see Hamner, Col. 3, Lines 31-56 and Col. 6, Lines 3-17]. Thus, this discloses that device information is transmitted to the management server.

Onaga, in the same field of managing status and communication of devices in the network endeavor, discloses the request for status information and the flow of status information of network device (= Multifunction Peripheral (MFP) 110a) in communication with the Host 110b, the file server 120 (= management server) and the workstation 150 (= another device) [see Onaga, Figs. 4-8 and Col. 9, Line 44 to Col. 10, Line 15 and Col. 11, Line 11 to Col. 12, Line 50]. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to incorporate the use of the request for status information and the flow of status information among devices in the network, disclosed by Onaga, into managing different types of devices in the network disclosed by Hamner, in order to keep the status information refreshed for improving performance

of the devices [see Onaga, Col. 12, Lines 34-50] and thus enhance the performance of the network.

Regarding claim 30, Hamner further teaches in said device information transmitting means transmits a plurality of different types of device information to said management server at predetermined timings, respectively (i.e., periodically gathering data, with scheduling, at core services implemented within the management server 12 wherein this data includes the types of devices in the network, the quantity of each type of devices, their connectivity, and tasks performed upon each of the devices) [see Col. 3, Lines 31-56 and Col. 6, Lines 3-17].

Regarding claim 31, Hamner further teaches said plurality of different types of device information is static information (= types of devices), semi-static information (= displaying print jobs = layout), and dynamic information (= displaying nonfunctioning printers = device status), and said transmitting means transmits said static information in accordance with a power-on and transmits said semi-static information and said dynamic information in accordance with a change in status of the device (i.e., to gather and maintain data regarding types of devices in the network and tasks performed on each of devices on-line and off-line) [see Col. 3, Lines 47-63 and Col. 9, Lines 3-17].

Regarding claim 32, Hamner further teaches a setting means for setting said timing (= scheduling, periodic basis) [see Col. 3, Lines 47-51 and Col. 6, Lines 3-17].

Regarding claim 33, Hamner teaches a processing program of device information in a network system in which a management server (= management server 12) for managing device information (= data) and various devices (= plurality of devices) are connected (i.e., managing a computer network including a plurality of devices wherein data is gathered about the configuration of the network including data about devices and the tasks performed upon each of the devices) [see Figs. 1 & 2A and Abstract and Col. 1, Lines 55-67 and Col. 3, Lines 31-47], comprising of transmitting the device information of the requesting device to said management server (i.e., periodically gathering data at core services implemented within the management server 12 wherein this data includes the types of devices in the network, the quantity of each type of devices, their connectivity, and tasks performed upon each of the devices) [see Col. 3, Lines 31-56].

Hamner does not explicitly teach a step of receiving a request to transmit the device information to said management server from another network device. However, Hamner does suggest data are periodically gathered at core services implemented within the management server 12 wherein this data includes the types of devices in the network, the quantity of each type of device, their connectivity, and tasks performed upon each of the devices [see Hamner, Col. 3, Lines 31-56 and Col. 6, Lines 3-17]. Thus, this discloses that device information is transmitted to the management server.

Onaga, in the same field of managing status and communication of devices in the network endeavor, discloses the request for status information and the flow of status information of network device (= Multifunction Peripheral (MFP) 110a) in communication

with the Host 110b, the file server 120 (= management server) and the workstation 150 (= another device) [see Onaga, Figs. 4-8 and Col. 9, Line 44 to Col. 10, Line 15 and Col. 11, Line 11 to Col. 12, Line 50]. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to incorporate the use of the request for status information and the flow of status information among devices in the network, disclosed by Onaga, into managing different types of devices in the network disclosed by Hamner, in order to keep the status information refreshed for improving performance of the devices [see Onaga, Col. 12, Lines 34-50] and thus enhance the performance of the network.

Regarding claim 34, Hamner does not explicitly teach an obtaining step of obtaining the device information of said device from the requesting device in accordance with said received request. However, Hamner does suggest managing a computer network including a plurality of devices wherein data is gathered about the configuration of the network including data about devices and the tasks performed upon each of the devices [see Hamner, Figs. 1 & 2A and Abstract and Col. 1, Lines 55-67 and Col. 3, Lines 31-47] and data are periodically gathered at core services implemented within the management server 12 wherein this data includes the types of devices in the network, the quantity of each type of device, their connectivity, and tasks performed upon each of the devices [see Hamner, Col. 3, Lines 31-56 and Col. 6, Lines 3-17]. Thus, this discloses that device information is transmitted to the management server.

Onaga, in the same field of managing status and communication of devices in the network endeavor, discloses the request for status information and the flow of status information of network device (= Multifunction Peripheral (MFP) 110a) in communication with the Host 110b, the file server 120 (= management server) and the workstation 150 (= another device) [see Onaga, Figs. 4-8 and Col. 9, Line 44 to Col. 10, Line 15 and Col. 11, Line 11 to Col. 12, Line 50]. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to incorporate the use of the request for status information and the flow of status information among devices in the network, disclosed by Onaga, into managing different types of devices in the network disclosed by Hamner, in order to keep the status information refreshed for improving performance of the devices [see Onaga, Col. 12, Lines 34-50] and thus enhance the performance of the network.

Regarding claim 35, Hamner further teaches in said device information transmitting step, a plurality of different types of device information is transmitted to said management server at predetermined timings, respectively (i.e., periodically gathering data, with scheduling, at core services implemented within the management server 12 wherein this data includes the types of devices in the network, the quantity of each type of devices, their connectivity, and tasks performed upon each of the devices) [see Col. 3, Lines 31-56 and Col. 6, Lines 3-17].

Regarding claim 36, Hamner further teaches said plurality of different types of device information is static information (= types of devices), semi-static information (= displaying print jobs = layout), and dynamic information (= displaying nonfunctioning printers = device status), and in said device information transmitting step, said static information is transmitted in accordance with a power-on and said semi-static information and said dynamic information are transmitted in accordance with a change in status of the device (i.e., to gather and maintain data regarding types of devices in the network and tasks performed on each of devices on-line and off-line) [see Col. 3, Lines 47-63 and Col. 9, Lines 3-17].

Regarding claim 37, Hamner further teaches a setting step of setting said timing (= scheduling, periodic basis) [see Col. 3, Lines 47-51 and Col. 6, Lines 3-17].

Regarding claim 38, Hamner teaches a recording medium which stores a processing program of device information in a network system in which a management server (= management server 12) for managing device information (= data) and various devices (= plurality of devices) are connected (i.e., managing a computer network including a plurality of devices wherein data is gathered about the configuration of the network including data about devices and the tasks performed upon each of the devices) [see Figs. 1 & 2A and Abstract and Col. 1, Lines 55-67 and Col. 3, Lines 31-47], wherein said processing program comprises of transmitting the device information of the requesting device to said management server (i.e., periodically gathering data at

core services implemented within the management server 12 wherein this data includes the types of devices in the network, the quantity of each type of devices, their connectivity, and tasks performed upon each of the devices) [see Col. 3, Lines 31-56].

Hamner does not explicitly teach a step of receiving a request to transmit the device information to said management server from another network device. However, Hamner does suggest data are periodically gathered at core services implemented within the management server 12 wherein this data includes the types of devices in the network, the quantity of each type of device, their connectivity, and tasks performed upon each of the devices [see Hamner, Col. 3, Lines 31-56 and Col. 6, Lines 3-17]. Thus, this discloses that device information is transmitted to the management server.

Onaga, in the same field of managing status and communication of devices in the network endeavor, discloses the request for status information and the flow of status information of network device (= Multifunction Peripheral (MFP) 110a) in communication with the Host 110b, the file server 120 (= management server) and the workstation 150 (= another device) [see Onaga, Figs. 4-8 and Col. 9, Line 44 to Col. 10, Line 15 and Col. 11, Line 11 to Col. 12, Line 50]. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to incorporate the use of the request for status information and the flow of status information among devices in the network, disclosed by Onaga, into managing different types of devices in the network disclosed by Hamner, in order to keep the status information refreshed for improving performance of the devices [see Onaga, Col. 12, Lines 34-50] and thus enhance the performance of the network.

Regarding claim 39, Hamner does not explicitly teach an obtaining step of obtaining the device information of said device from the requesting device in accordance with said received request. However, Hamner does suggest managing a computer network including a plurality of devices wherein data is gathered about the configuration of the network including data about devices and the tasks performed upon each of the devices [see Hamner, Figs. 1 & 2A and Abstract and Col. 1, Lines 55-67 and Col. 3, Lines 31-47] and data are periodically gathered at core services implemented within the management server 12 wherein this data includes the types of devices in the network, the quantity of each type of device, their connectivity, and tasks performed upon each of the devices [see Hamner, Col. 3, Lines 31-56 and Col. 6, Lines 3-17]. Thus, this discloses that device information is transmitted to the management server.

Onaga, in the same field of managing status and communication of devices in the network endeavor, discloses the request for status information and the flow of status information of network device (= Multifunction Peripheral (MFP) 110a) in communication with the Host 110b, the file server 120 (= management server) and the workstation 150 (= another device) [see Onaga, Figs. 4-8 and Col. 9, Line 44 to Col. 10, Line 15 and Col. 11, Line 11 to Col. 12, Line 50]. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to incorporate the use of the request for status information and the flow of status information among devices in the network, disclosed by Onaga, into managing different types of devices in the network disclosed by Hamner, in order to keep the status information refreshed for improving performance

of the devices [see Onaga, Col. 12, Lines 34-50] and thus enhance the performance of the network.

Regarding claim 40, Hamner further teaches in said device information transmitting step in said processing program, a plurality of different types of device information is transmitted to said management server at predetermined timings, respectively (i.e., periodically gathering data, with scheduling, at core services implemented within the management server 12 wherein this data includes the types of devices in the network, the quantity of each type of devices, their connectivity, and tasks performed upon each of the devices) [see Col. 3, Lines 31-56 and Col. 6, Lines 3-17].

Regarding claim 41, Hamner further teaches said plurality of different types of device information is static information (= types of devices), semi-static information (= displaying print jobs = layout), and dynamic information (= displaying nonfunctioning printers = device status), and in said transmitting step, said static information is transmitted in accordance with a power-on and said semi-static information and said dynamic information are transmitted in accordance with a change in status of the device (i.e., to gather and maintain data regarding types of devices in the network and tasks performed on each of devices on-line and off-line) [see Col. 3, Lines 47-63 and Col. 9, Lines 3-17].

Regarding claim 42, Hamner further teaches said processing program further comprises a setting step of setting said timing (= scheduling, periodic basis) [see Col. 3, Lines 47-51 and Col. 6, Lines 3-17].

Other References Cited

8. The following references cited by the examiner but not relied upon are considered pertinent to applicant's disclosure.

A) Roy et al, U.S. Pat. No. 6,496,859, discloses managing devices in the network by using SNMP and DLP.

B) Iizuka, U.S. Pat. No. 6,430,612, discloses network device management by monitoring, controlling, and specifying the type of network device.

C) Justice, jr. et al, U.S. Pat. No. 6,418,469, discloses managing conditions of devices participating in a network.

D) Shaffer et al, U.S. Pat. No. 6,249,814, discloses management device includes a directory containing the identification information of the network devices.

E) Bondi, U.S. Pat. No. 5,710,885, discloses network management with improved node discovery and monitoring of nodes in the network.

F) Stupek, Jr. et al, U.S. Pat. No. 6,526,442, discloses managing devices participating in a network.

G) McCormack et al, U.S. Pat. No. 6,360,255, discloses managing, maintaining and displaying information about devices in the network.

H) Ellesson et al, U. S. Pat. No. 6,101,541, discloses a central administrative directory server for managing a plurality of client nodes in the network.

l) Russell et al, U.S. Pat. No. 5,611,046, discloses managing peripheral devices in the network.

9. A SHORTENED STATUTORY PERIOD FOR RESPONSE TO THIS ACTION IS SET TO EXPIRE THREE MONTHS, OR THIRTY DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. FAILURE TO RESPOND WITHIN THE PERIOD FOR RESPONSE WILL CAUSE THE APPLICATION TO BECOME ABANDONED (35 U.S.C. § 133). EXTENSIONS OF TIME MAY BE OBTAINED UNDER THE PROVISIONS OF 37 CAR 1.136(A).

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Philip Tran whose telephone number is (703) 308-8767. The Group fax phone number is (703) 872-9306.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hosain T. Alam, can be reached on (703) 308-6662.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-3900.

Philip Tran
Philip B. Tran
Art Unit 2155
February 18, 2004